# THE IMPACT OF VARIOUS FACETS OF CUSTOMER-BASED BRAND EQUITY ON BRAND RESONANCE

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#### ABSTRACT

Measuring the extent to which customer-based brand equity (CBBE) influences brand resonance (BR) in the context of carbonated soft drinks industry in Bangladesh was the principal objective of this research. In order to do so, a new BR model was developed. In addition, measuring CBBE was an ancillary objective. CBBE was measured by using the arguably two dominant CBBE instruments: CBBE Model-1 by Yoo and Donthu (2001) and CBBE Model-2 by Netemeyer et al. (2004). BR was measured by an instrument that was developed from the work of Lehmann et al. (2008). The measurement models of both CBBE instruments fit the data satisfactorily with some negligible issues. The BR was measured from two distinct datasets: Dataset-1 and Dataset-2. Though both CBBE instruments had some model fit issues in the causal relationship analyses of CBBE and BR, both CBBE Model-1 and CBBE Model-2 had outstanding explained variance estimates on BR measure. The impact of CBBE on BR is an untapped territory of brand management; therefore, measuring the influence of CBBE on BR along with separately measuring CBBE and BR in multiple product or service categories across industries using the instrument of the current research has great values for practitioners.

Keywords: Brand Management, Brand Equity, Customer-Based Brand Equity, Brand Resonance.

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#### 1. INTRODUCTION AND LITERATURE REVIEW

In the relationship domain of CBBE and brand BR, the notion of examining to what degree CBBE influences BR still remains to be an untapped area of research and that untapped area happens to be the motivational source of this research. CBBE has been the center of vast amount of research since CBBE's outset as a mean to measure the brand equity. Even though there are quite a number of methods exist, the indirect approach via intermediate measure of CBBE is particularly of interest in this paper. Over the last few decades, the conceptualization and measurement of CBBE have been in active interest to both the academics and practitioners. As a result, the measurement of CBBE has been equipped with some remarkable instruments. Though Aaker and Keller conceptualized the CBBE, they did not develop the measurement scale (Christodoulides & Chernatony, 2010). The measurement of CBBE, in a comprehensive manner, was initiated by Lassar

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et al. (1995). Their conceptualization of brand equity as a five-dimensional construct (performance, social image, value, trustworthiness, and attachment) was a sophisticated adaptation of previous partial research on CBBE measurement (Park & Srinivasan, 1994; Martin & Brown, 1990). Later, another remarkable work in the conceptualization and measurement of CBBE heavily based on the conceptual framework of Aaker (1991, 1996) and Keller (1993) was conducted by Yoo and Donthu (2001).

The authors made an effort to ensure the generalizability of the study through diverse demographics: Americans, South Koreans, Korean American, as well as diverse product types: Athletic shoes, Films, and TV (color). Yoo and Donthu conceptualized the CBBE in four dimensions: brand loyalty, perceived quality, brand awareness, and brand association. To this day Yoo and Donthu (2001)'s study on conceptualization and measurement of CBBE remains to be a pivotal one. Due to the immediate acceptance of the work of Yoo and Donthu (2001), a large number of replications followed the work. Particularly, the work of Washburn and Plank (2002) was a replication as well as an extension of the original research due to the initiative measuring CBBE in the context of co-branding. In addition, Washburn and Plank (2002)'s replication initiative was originally considered to be a critique of the work of Yoo and Donthu (2001) and eventually proved to be a valued evaluation of the Yoo and Donthu (2001)'s work. Regardless of the importance of previous works on conceptualization and measuring CBBE, none were irrefutable, and not being irrefutable instigated further works on this issue. Among those works, one seminal research was conducted on the rereconceptualization and measurement of the facets of CBBE by Netemeyer et al. (2004). The conceptual foundation of this research was based on the works on Aaker (1996) and Keller (1993); however, unlike the work of Yoo and Donthu (2001), the research of Netemeyer et al. (2004) was an improved work from a measurement standpoint. Netemeyer et al. (2004) developed nomological network consisting of core/primary facets of CBBE and five corresponding brand associations and together their impact on brand purchase intention. The CBBE measure of Netemeyer et al. (2004) consisted of three facets (perceived value for the cost / perceived quality as one, uniqueness, and willingness to pay a price premium. The conceptualization of BR was originated in the work of Keller (2001). Sharma (2017a) developed a framework for measuring CBBE from the work of Aaker (1996) in the context of Indian smartphone industry. Raji et al. (2018) examined the CBBE in automotive industry and studied how the social media communication affects the expansion of CBBE in automotive industry by. Another novel approach to measure CBBE was taken by Mathur (2018) in which the author assimilated a conceptual model conceptualizing CBBE as a consequence of five antecedents, in the context of social media marketing, that originates from psychology, sociology, and marketing. Mills and Williams (2016) conceptualized and measured consumer-based brand equity as a mediating construct. Sharma (2017b) developed and measured a model of CBBE and strore image in the Indian sportswear industry. Saeed and Shafique (2019) conducted measured how CBBE influences the tourist destinations when social media plays a mediating role in between CBBE and purchase intention or destination selection. The authors developed the CBBE model on their study that mostly based on the works of Keller (2003) and Aaker (1996). In another study on destination brands, Tasci (2019) explored the relationship between CBBE and financial-based brand equity FBBE. Similarly, Rani (2019) measured CBBE of a particular destination brand in India. Sürücü et al. (2019) – on their study in hotel sector-tested how CBBE affects customer loyalty and to what extent customer satisfaction and trust mediates the relationship of CBBE and customer loyalty. Cho and Hwang (2020) reconceptualized the CBBE and investigated how the constructs such as brand origin and brand identity affect the structural composition of CBBE drivers. They developed the CBBE model-taken inspiration from various works in CBBE literature especially from the works of Aaker (1991) and Keller (1993) and conducted study two countries on fashion brands. Raza et al. (2020) conducted a study on the measuring the effect of CBBE on turnover intention–when customer citizen behavior plays a mediating role–in the Aviation Industry of Pakistan. The authors used the CBBE model developed by Yoo and Donthu (2001). Pina and Dias (2020) also used the Yoo and Donthu's (2001) CBBE model in measuring the effect of brand experience on CBBE in a study conducted on consumers of Nespresso in Portugal.

The conceptualization of BR was originated in the work of Keller (2001). Keller (2001) conceptualized BR as a paramount part of brand-building blocks in the CBBE pyramid. BR was positioned on the top of the pyramid and designed to be attained at the very end, precisely, after achieving the five parts (brand salience, brand performance, brand imagery, consumer judgements, consumer feelings, consumer brand resonance) prior to BR. Keller (2001) regarded BR as the most pivotal among the brand-building blocks BR because BR is essentially the manifestation of consumer responses that ultimately firms desire, and BR happens, among many other ways, when consumers are completely synchronized with brand. Therefore, through perfect brand resonance firm gets to enjoy benefits, such as highly successful communications and price premium (Keller, 2001). All the previous studies on BR more or less drew inspiration from the work of Keller (2001) as it was done in this study; however, in the current work BR was conceptualized as a separate construct as opposed to as a crucial measure for achieving CBBE as it was discussed in the work of Keller (2001). Although, reasons behind the deviation in the conceptualization of BR were the measurement aspects of BR as a separate construct rather than developing it philosophically distinct from the work of Keller (2001). One of the several notable efforts to measure the BR as a separate construct, not in the same framework of Keller (2001)'s CBBE model, is Moore (2007)'s - in which the authors measured the relationship nature of constructs, such as self-brand connections (SBC), brand resonance, consumer emotions, and consumer attitude; in the work of Moore (2007), brand resonance conceptualized and measured as a mediating construct. A replication study of Keller (2001)'s CBBE model was conducted by Aziz and Yasin (2010) in the context of Malaysian Banking Industry; the intention was to measure the brand equity through achieving the brand resonance. Huang et al. (2014) studied the relationship among brand equity, customer satisfaction, brand resonance, and purchase intention in the context of cultural and creative industries in Taiwan. The effort of Huang et al. (2014) was fairly unique because of the extraction of brand resonance from the framework of CBBE model, and the conceptualization of BR as a mediating construct among the relationship of brand equity, customer satisfaction, and purchase intention. Huang et al. (2014) particularly focused on how brand resonance mediates the impact of brand equity and customer satisfaction on purchase intention. Cheng et al. (2019) developed and measured a model, contextualized in social networking brand community, in which BR is a consequence that has antecedents, such as information search, social interactivity, and brand engagement. Cheng et al. (2019)'s work was heavily theoretically rooted in Keller's (2013) work. Ambedkar et al. (2018) measured the BR score in the context of financial services by modifying the CBBE pyramid from Keller's (2001) work. Another pivotal work, theoretically underpinned by Keller's (2013) work, on developing a framework of CBBE and BR in the context of destination marketing was conducted by Duman et al. (2018).

Jang et al. (2021) developed a BR model – founded on the works of Keller (1993, 2001) – to measure the mediating role that BR plays between servitization and customer retention. Following the work of Keller (2001), Kang et al. (2021) developed a unidimensional BR model to measure

how millennial consumers develops BR in the context of luxury brands in developing countries. On the pursuit of formulating a better measure for BR, Raut et al. (2020) constructed a robust new nine-dimensional BR model based on the work of Keller (2001). Habib et al. (2021) developed a BR model–from Keller's (2001) CBBE pyramid model–to investigated the relationship between relationship marketing and BR mediated by electronic word of mouth.

Regardless of what portion of research has been conducted on CBBE and BR as separate constructs thus far, there's substantial lack of research about how CBBE affects BR in a structural relationship, considering BR a separate and endogenous construct. Even though it may be an intuitive assertion that CBBE and BR are positively related, empirical investigations must be performed to examine how the constituents of the CBBE models relate to those of the BR model. The current research was designed to assess how CBBE influences BR, and CBBE was represented by two of the most dominant CBBE measuring scales: the works of Yoo and Donthu (2001)'s and Netemeyer et al. (2004)'s; the BR model was acquired from the formative work of Lehmann et al. (2008). The entire study was in the context of carbonated soft drinks industry in Bangladesh. Rationale for selecting this industry is one of the extremely competitive industries in the fast-moving consumer goods (FMCG) sector. Both the domestic and the multinational companies operate in this industry. Due to the highly intense competitive nature of the industry, high volatility exists in sustaining market shares. Therefore, application of the theoretically sound brand management constructs such as CBBE and BR in this industry could be beneficial for the companies. However, prior to initiating the application stage, it is prudent that the CBBE and BR constructs go through rigorous empirical assessment to verify their efficacy. On that note, finding and selecting the best CBBE and BR model is mandatory before implying that those models will hold up in practice. The importance of deriving comparatively better model of CBBE and BR from this study cannot be stressed because upon selecting the best CBBE and BR models, expansion of the sphere of application from carbonated soft drinks industry to the entire FMCG products could change strategic marketing landscape of Bangladesh's FMCG sector-and possibly a lot other sector. The eight different carbonated soft drinks brands that are selected in this study encompass the almost the entire market.

In order to extract the influence of CBBE on BR, it was prudent to first measure the models' ability to measure CBBE in the settings that are different from the settings in which, CBBE models were originally developed. The measurement of CBBE and BR was conducted in the carbonated soft drinks industry in Bangladesh across eight different soft drinks brands.

## 2. CUSTOMER-BASED BRAND EQUITY (CBBE) MEASURES

In order to add rigor to the study and evaluate the strength of the dominant CBBE measures, two CBBE measures were used. Having multiple models representing CBBE can also be justified by the intention to use the models in a comparative manner to see how the constituents of the measures hold up in the context of the current study.

## 2.1. Model 1: Yoo and Donthu (2001)

Model 1: Yoo and Donthu (2001)'s scale of measuring CBBE was one of the two measures of CBBE used in this paper. Measurement of CBBE using model 1 was relatively comprehensive and designed to perform better in different cultural settings. Originally, in the work of Yoo and Donthu

(2001) two types of instruments were developed for measuring CBBE: instrument 1, a 10-item multidimensional brand equity (MBE) (dimensions: band loyalty - 3 items, perceived quality - 2 items, brand awareness/ brand associations - 5 items) and 4-item overall brand equity (OBE) and instrument 2, a 15-item multidimensional scale (dimensions: brand loyalty – 3 items, perceived quality – 6 items, brand awareness 3 – items, and brand associations – 3 items) from which the 10 item MBE was adapted. The 4-item OBE measure was not part of the 15-item MBE model. In the current research, the 10-item (3 dimensions) MBE model was used without the 4-item OBE. To make things simple and convenient, the adapted CBBE model from the work of Yoo and Donthu (2001) is called CBBE Model-1 throughout this paper.

### 2.2. Model 2: Netemeyer et al. (2004)

Model 2, another measure of CBBE that was used in this paper, was the work of Netemeyer et al. (2004). In model 2, authors made an outstanding effort to make sure the comprehensiveness and generalizability through model's rigorous methodological settings. Facets of CBBE model-2 includes perceived quality/ perceived value for the cost (PQ/PVC)-8 items (4 items for PQ and 4 items for PVC), Uniqueness (UQ)-4 items, Willingness to pay a price premium (WPP)-4 items. In the current research, 15-item (3 dimensions: PQ/PVC-8 items, UQ-4 items, and WPP-3 items) CBBE model was adapted from Netemeyer et al. (2004)'s work. To keep things simple and convenient, the adapted CBBE model work of Netemeyer et al. (2004) is called CBBE Model-2 throughout this paper.

Among the facets of CBBE, PQ/PVC and UQ were considered exogenous constructs, and WPP was considered endogenous constructs. To ensure the nomological validity of CBBE, another construct brand purchase intent was conceived in the original conceptual framework as an ultimate brand performance metric. Following figure shows the model:



Figure 1: Model of Core/primary CBBE facets and brand purchase.

Source: Netemeyer et al. (2004).

#### 3. MEASURE OF BRAND RESONANCE

#### 3.1. Model 3: Lehmann et al. (2008)

Model 3, the brand resonance model, was developed from the work of Lehmann et al. (2008) even though the inspiration of working on brand resonance came from Keller (2001)'s work. In the work of Lehmann et al. (2008), the authors used 27 brand performance constructs, and some of them were collected from different sources. In this paper, BR model consists of two constructs: intention (3 items), bonding (2 items) among the 27 constructs. The rationale for selecting those two constructs out of 27 was that only those constructs could conform to the current paper's conceptualization of BR; in addition, both constructs were in the same factor dubbed *preference* in the work of Lehmann et al. (2008). Though there were others constructs under the preference factor, only intention and bonding could be theoretically justified as BR measures. According to Keller (2001), BR signifies a complete merge of brand and customer. In such situations, consumer would not be able to differentiate her/himself from the brand rather would say "I am the brand."

#### 4. CONCEPTUAL FRAMEWORKS AND HYPOTHESES FORMULATION



Figure 2: Structural relationship of CBBE and BR

Source: Authors.

It is of interest to depict how good CBBE models perform in measuring CBBE and how each of the CBBE models relate to BR, and those two aspects would indicate the nomological validity across CBBE and BR models. Following Figure depicts the conceptual framework of relationship between CBBE and BR.

Figure 2, in the previous page, illustrates the structural relationships of the constituents of CBBE (Model 1 & 2) and BR. The next section of this paper deals with the empirical analyses of the conceptual framework of CBBE and BR.

Testing the structural relationships of the constituents of CBBE models (1 & 2) and BR model (dataset 1&2), following hypotheses were implied:

### 4.1. CBBE Model-1 and BR Model (Dataset-1)

- H1 Brand loyalty is positively related to Bonding
- H2 Brand loyalty is positively related to Intention
- H3 Brand quality is positively related to Bonding
- H4 Brand quality is positively related to Intention
- H5 Brand awareness/association is positively related to Bonding
- *H6 Brand awareness/association is positively related to Intention*

### 4.2. CBBE Model-2 and BR Model (dataset-2)

- H7 Perceived quality/perceived value is positively related to Bonding
- H8 Perceived quality/perceived value is positively related to Intention
- H9 Uniqueness is positively related to Bonding
- H10 Uniqueness is positively related to Intention
- H11 Willingness to pay a price premium is positively related to Bonding
- H12 Willingness to pay a price premium is positively related to Intention

### 5. METHODOLOGY AND RESULTS

### 5.1. Study Part I: CBBE Model-1

Study part-1: CBBE Model-1 was part one of a three-part study, which demonstrates the measurement of CBBE and BR. The CBBE measure of Model-1 consists of three dimensions -

brand loyalty, perceived quality, and brand awareness/associations - with a total of ten items. There were eight different soft drinks brands (Coca-Cola, 7 Up, Pepsi, Fanta, Mirinda, Sprite, Mountain Dew, and Mojo – only domestic brand) upon which the consumer responses were extracted from.

### 5.1.1. Method

Participants & Designs: Initial sample size was 400. However, the sample size eventually decreased in a two-step data screening process: first, 16 cases were discarded due to non-response error. Then an outlier test was conducted using the Mahalanobis distance method (Ghorbani, 2019) and further 20 cases of outliers were found and removed. Cases with missing value were replaced with mean value (most frequent value for the categorical variables). After data screening, the sample was 364. Among of which, 51.4% (184) was student and 48.6% (177) was non-student. The data was collected using take-home survey for which participants were briefed about content and objective of the study.

Measure: The adapted questionnaire contained 3 models – CBBE Model-1, CBBE Model-2, and BR Model. The scales of CBBE model–1 was surveyed with a 5-point Likert scale anchored by" 5 = strongly agree" and 1" = strongly disagree."

### 5.1.2. Results

Measurement results: Confirmatory factor Analysis (CFA) (using IBM SPSS Amos 23) was conducted to test the measurement model of CBBE Model–1. First, the fit of the model was assessed based on following fit indices: comparative fit index (CFI), goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI), root mean square residual (RMSEA), and standardized root mean residual (SRMR). Few other indices were reported as well to exhibit thoroughness in terms of fit measure. The results (shown in Table 1) indicated an overall good fit based on value of indices. Mainly the prevalent indices viz. GFI (0.94), AGFI (0.94), CFI (0.98), SRMR (0.035) were well above the required values, which imputed a good fit; only the RMSEA (0.083) was of moderate value; hence, the below reference value of PCLOSE (0.001). Based on the fit indices, it can be said that the CBBE model-1 fit the data very well (Hu & Benter, 1999). Every aspect of the measurement model fit indices and a little better than Washburn and Plank's (2002) 15-item three-factor multidimensional brand equity model. Compared to the Sürücü et al.'s (2019) comprehensive CBBE model's measurement indices, this study's CBBE model-1's measurement model indices fare quite better.

Fit Indi	ces
<b>Chi-Square (P = 0.000)</b>	111.953
Degrees of freedom	32
CMIN/DF	3.499
GFI	0.94
AGFI	0.94
RMSEA	0.083

 Table 1: Measurement Model (CBBE Model-1) Fit Indices

Table 1: continu	led
PCLOSE	P = 0.001
SRMR	0.035
CFI	0.98
NFI	0.97
TLI	0.97

Another aspect of the test of the measurement model was assessment of the psychometric properties of the scales namely, Cronbach's alpha, composite reliability (CR), convergent validity (CV), and discriminant validity (DV) (shown in Table 2). Cronbach's alpha of each of the constructs was measured to assess the internal consistency of the scales, and all the constructs indicated excellent internal consistency. The composite reliability (CR) of all the constructs were above 0.80, which indicated excellent internal consistency as well. The correlation estimates of constructs are as follows: 0.83 between brand loyalty (LO) and perceived quality (QL) (P < 0.001); 0.60 between brand loyalty (LO) and brand awareness/associations (AW/AS) (P < 0.001); 0.68 between perceived quality (PQ) and brand awareness/associations (AW/AS) (P < 0.001). Due to the high factor loadings, the convergent validity (CV) was found to be excellent with the exception of two items: AW3 and AS3. AW3 (0.75) was just below the threshold, and AS3 (0.23) was quite low, which presumed to be caused by being a reversed scored scale. Elimination of the item with low loadings was not possible and could not be justified in this study. The domain of this study regarding that purview was only to report the results and comment on that issue. Rest of the items' factor loadings were above 0.80, confirming convergent validity (CV) of the scales. And the discriminant validity, which was indirectly measured through average variance extracted (AVE) being greater than maximum variance shared (MSV), and all of the constructs' average variance extracted (AVE) was greater than the maximum shared variance (MSV); thus, indicating discriminant validity of the constructs. The reliability and validity statistics indicate that the CBBE model-1 is a reliable and valid measure of CBBE (Fornell & Larcker, 1981).

Similar to the measurement model fit indices, overall, the reliability and validity measures of the CBBE model-1 are as good as the Yoo and Donthu's (2001) CBBE model 3 and Washburn and Plank's (2002). This study's CBBE model-1's reliability and validity measures are also similar to those of Sürücü et al.'s (2019) comprehensive CBBE model and Saeed and Shafique's (2019)'s CBBE model.

Construct	Items	Cronbach's alpha	CR	MaxR(H)	CV (Item Loadings)	AVE	MSV
Brand Loyalty (LO)		0.96	0.96	0.95		0.90	0.70
•••	LO1				0.93***		
	LO2				0.97***		
	LO3				0.94***		
Perceived Quality		0.94	0.94	0.98		0.87	0.70
(QL)	QL2				0.92***		
· · · /	QL3				0.96***		
Brand Awareness		0.81	0.84	0.98		0.54	0.46
(AW) / Associations	AW2				0.81***		
(AS)	AW3				0.75***		

**Table 2:** Reliability and Validity Measures (CBBE Model-1)

Table 2: continued			
AS1	0.85***		
AS2	0.84***		
AS3	0.23***		

Notes: # CV - Convergent validity, CR - Composite reliability, AVE - Average variance extracted, MSV - Maximum shared variance, MaxR(H) – Maximal reliability. # \*\*\*p < 0.001 (two-sided).

#### 5.2. Study Part-2: CBBE Model-2

Study part-2: CBBE Model-2 was part two of the three-part study, which demonstrates the measurement of CBBE and BR. The CBBE measures of Model - 2 consists of three facets perceived quality and perceived value for the cost, uniqueness, and willingness to pay a price premium - with a total of fifteen items. Brands remained the same as the first part of the study; total of eight different soft drinks brands (Coca-Cola, 7 Up, Pepsi, Fanta, Mirinda, Sprite, Mountain Dew, and Mojo – only domestic brand).

#### 5.2.1. Method

Participants & Designs: The initial sample size was 400. However, the sample size eventually became 370 after a two-step data screening process: first, 8 cases were discarded due to nonresponse error. Then an outlier test was conducted using the Mahalanobis distance method (Ghorbani, 2019) and 22 cases of outliers were found and removed. Cases with missing value were replaced with mean value (most frequent value for the categorical variables). Among 370, 49.5% (183) was student and 50.5% (187) was non-student. The data was collected using take-home survey for which participants were briefed about content and objective of the study.

Measure: The adapted questionnaire contained total of 15 items of 3 dimensions to measure brand equity. The scales of CBBE model-2 was surveyed with a 5-point Likert scale anchored by 5 =strongly agree" and 1" = strongly disagree." It is prudent to note that some of the errors of measurement model were by-design covaried to produce a better fitted model. The errors were covaried only within constructs not between/among the constructs. Table 3 contains covarying errors.

Construct	Items	Errors	
	PQ/PVC1 & PQ/PVC2	el 🔶 e2	
	PQ/PVC1 & PQ/PVC6	el 🔶 e6	
Perceived quality and perceived value for the cost	PQ/PVC2 & PQ/PVC5	e2 <b>•••</b> e5	
	PQ/PVC5 & PQ/PVC8	e5 🔶 e8	
	PQ/PVC7 & PQ/PVC8	e7 <b>←</b> → e8	

CODDENT 11 0

### 5.2.2. Results

Measurement model results: As it was done for the CBBE Model–1, a Confirmatory Factor Analysis (CFA) (using IBM SPSS Amos 23) was run to test the measurement model CBBE Model-2. First, the fit of the model was assessed based on following fit indices: comparative fit index (CFI), goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI), root mean square residual (RMSEA), and standardized root mean residual (SRMR). The results are in Table 4.

<b>Fit indices</b>	
Chi-Square (P = 0.000)	200.506
Degrees of freedom	82
CMIN/DF	2.445
GFI	0.93
AGFI	0.90
RMSEA	0.063
PCLOSE	0.030
SRMR	0.0211
CFI	0.98
NFI	0.97
TLI	0.98

Table 4: Measurement Model (CBBE Model-2) Fit indices

The results of the measurement model showed that the model had very good fit. All indices namely, GFI (0.93), AGFI (0.90), CFI (0.98), SRMR (0.0211) were well above the threshold values; only PCLOSE (0.030) was an exception with a below the reference value. The fit of indices discussed above demonstrate that the CBBE model-2 has very good fit (Hu & Benter, 1999). The fit indices of CBBE Model-2 are actually better that than those of Netemyer et al. (2004) – especially the RMSEA–and Washburn and Plank's (2002), and very close to the fit indices of the comprehensive and more robust CBBE model of Sürücü et al.'s (2019). The relatively good fit of measurement model CBBE Model–2 demonstrated that it is more efficient in measuring CBBE compared to CBBE model-1.

Table 5: Reliability and Validity Measures (CBBE Model-2)							
Construct	Items	<b>Cronbach's</b>	CR	MaxR(H)	CV (Item	AVE	MSV
		alpha			Loadings)		
Perceived quality and		0.98	0.98	0.94		0.85	0.78
perceived value for the	PQ/PVC1				0.92***		
cost (PQ / PVC)	PQ/PVC2				0.93***		
	PQ/PVC3				0.94***		
	PQ/PVC4				0.93***		
	PQ/PVC5				0.92***		
	PQ/PVC6				0.93***		
	PQ/PVC7				0.92***		
	PQ/PVC8				0.90***		
Uniqueness (UQ)		0.94	0.94	0.98		0.79	0.78
	UQ1						
	UQ2						
	UQ3						

Table 5: Reliability and Validity Measures (CBBE Model-2)

Table 5: continued						
	UQ4					
Willingness to pay a price premium (WPP)	WPP1 WPP2 WPP3	0.84	0.86	0.99	0.684	0.677

*Notes:* # CV – Convergent validity, CR – Composite reliability, AVE – Average variance extracted, MSV – Maximum shared variance, MaxR(H) - Maximal reliability. # \*\*\*P < 0.001 (two-tailed).

The psychometric properties of the scales of CBBE Model-2 viz. Cronbach's alpha, composite reliability (CR), convergent validity (CV), and discriminant validity (DV) were examined. The correlation estimates of the constructs are as follows: 0.88 between PQ/PVC and UQ (P < 0.001), 0.82 between PQ/PVC and WPP (P < 0.001), and 0.76 between UQ and WPP (P < 0.001). One of the measures of internal consistency: Cronbach's alpha values of the constructs were excellent (PQ/PVC = 0.98, UQ = 0.94, and WPP = 0.84), and another measure of internal consistency-composite reliability (CR) with outstanding values (PQ/PVC = 0.98, UQ = 0.94, WPP = 0.86) indicated strong internal consistency. Table 5 contains necessary measures. One of item, WPP1, of the willingness to a price premium dimension has a bit low but acceptable level of factor loading (Kline, 1998).

The convergent validity (CV) of all the constructs except for WPP1 was found to be excellent because of high factor loadings. And AVE for each of the construct was greater than the MSV; therefore, all the constructs were found to have achieved the discriminant validity. Given the reliability and validity measures discussed above the CBBE model-2 has proved to be a reliable and valid CBBE model. The reliability and validity measures of CBBE model-2 are also better than those of Netemeyer et al. (2004) and Washburn and Plank's (2002) and Saeed and Shafique's (2019), and almost identical to those of Sürücü et al.'s (2019).

Structural model results: The structural model CBBE Model–2 was tested to examine the nomological validity of the model. The nomological network is illustrated in the Figure 3. The structural model was tested with latent and manifested variables as opposed to the path analysis with composite variables. Following Table 6 contains the fit indices of the structural model.

The fit indices of the structural model showed a moderate fit because some of the indices were above and below the reference value namely, GFI (0.88) and AGFI (0.84) just below the 0.90, in addition the CMIN/DF is above 3 though it is within 5-10, the PCLOSE is below 0.05.

Fit indices				
Chi-Square (P = 0.000)	336.047			
Degrees of freedom	87			
CMIN/DF	3.863			
GFI	0.88			
AGFI	0.84			
RMSEA	0.088			
PCLOSE	0.000			
SRMR	0.0220			

**Table 6**: Structural Model Fit Indices (CBBE model-2)

#### Table 6: continued

CFI	0.97
NFI	0.95
TLI	0.96





Source: Authors.

		Estimate	Р	R <sup>2</sup>
PQ/PVC	→ WPP	0.716	***	0.60
UQ	→ WPP	0.127	0.114	0.09

Notes: \*\*\*P < 0.001(two-tailed).

Altogether, the structural model appeared to have suffered from some fit issues. The validity of the nomological network of this model was assessed by the regression estimates in Table 7. Both exogenous constructs, perceived quality & perceived value for the cost (PQ/PVC) and uniqueness (UQ), explained 69% ( $\mathbb{R}^2$ ) of the endogenous construct, willingness to pay a price premium (WPP). The squared multiple correlation value indicated exogenous constructs' good predictive power in anticipating the endogenous construct WPP. However, in individual contribution assessment, uniqueness's predictability of WPP had turned out be statistically insignificant (P = 0.114). Only, PQ/PVC had statistically significant predictive power on WPP.

#### 5.3. Study Part-3: BR Model

Study part-3: BR Model was part three of the three-part study, which demonstrates the measurement of CBBE and BR. The BR Model consists of two dimensions (bonding -3 items, intentions -2 items) with total of five items. Brands remained the same as they were in the study part-1: CBBE Model-1 and study part-2: CBBE Model-2; total of eight different soft drinks brands.

### 5.3.1. Method

Participants & Designs: The primary objective of this study was to measure the impact of CBBE on BR. And, since two different CBBE models were used against one BR model, BR was measured on two occasions: one with the scales of CBBE Model-1 and another with the scales of CBBE Model-2. As a result, BR ended up with two datasets: dataset–1 (BR model and CBBE Model-1 were measured in the same questionnaire) and dataset–2: (BR model and CBBE Model-2 were measured in the same questionnaire). Testing of the structural relationship between CBBE and BR was conducted within datasets not across datasets (CBBE Model-1 was against the BR Model that was measured in dataset-1, and CBBE Model-2 was run against the BR Model that was measured in dataset-2). While testing the BR measurement model, two BR measurement models were tested from two datasets.

The participants and design of the study part-3:BR Model were same as they were in study part-1: CBBE Model-1 and study part-s2: CBBE Model-2. The sample size of BR measure from dataset-1 was 364 and from dataset-2 was 370.

Measure: The BR Model contained two dimensions with total of five items in both questionnaires. The scales of BR Model were surveyed with a 5-point Likert scale anchored by" 5 = strongly agree" and 1" = strongly disagree."

To produce a better model, some of the errors of BR measurement model were covaried within constructs not between/among the constructs. Following table contains the errors and their associated construct of two datasets.

Dataset Constructs Items Errors				
Dutuset		D1 & D2	-2	
Dataset-1	Bonding	B1 & B3	es 🛶 es	
		B2 & B3	e4 <b>←</b> → e5	
Dataset-2	Bonding	B1 & B3	e3 🔶 e5	
		B2 & B3	e4 🔶 e5	

### Table 8: Covaried Errors of BR Model

### 5.3.2. Results

Two tier confirmatory factor analyses (CFA) were conducted to test the measurement models of BR Models from two different datasets.

Measurement results: In CFA (using IBM SPSS Amos 23), first the model fit was assessed based on following fit indices: comparative fit index (CFI), goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI), root mean square residual (RMSEA), and standardized root mean residual (SRMR). The results are in Table 9. The fit indices of BR Model from the dataset-1 were mostly good except for CMIN/DF (4.520) and the associated p-value (0.011). Other than that, everything, namely GFI, AGFI, CFI, SRMR were well above and below the threshold. The fit indices of BR

Model from the dataset-2 indicated a near perfect fit. All indices were well above and below the threshold. The fit indices–especially the RMSEA, which is below 0.05–from the dataset-2 is robust and indicate the BR model fit the data from dataset-2 extremely well (Hu & Benter, 1999).

E'4 to diaco	Datasets			
Fit indices	Dataset-1	Dataset-2		
Chi-Square	9.040 (p = 0.011)	2.451 (P = 0.294)		
Degrees of freedom	2	2		
CMIN/DF	4.520	1.226		
GFI	0.99	0.997		
AGFI	0.93	0.98		
RMSEA	0.098	0.025		
PCLOSE	0.08	0.569		
SRMR	0.0074	0.0033		
CFI	0.997	1.00		
NFI	0.996	0.999		
TLI	0.99	0.999		

Table 9: BR Measurement Model Fit Indices

Thereafter, the psychometric properties of two BR measurement models viz. composite reliability, convergent validity, and discriminant validity were examined. Cronbach's alpha values indicated an excellent internal consistency across datasets. Moreover, the composite reliability (CR) of the constructs was very good, confirming the excellent internal consistency. The high loadings showed outstanding convergent validity across datasets. However, constructs of dataset-1 fell short on attaining the discriminant validity (AVE 0.87 < MSV 0.90) by very small margin. In contrast, the constructs of the dataset-2 found to be achieved the discriminant validity. The reliability and validity statistics from both the datasets are well above the thresholds and indicate that the BR model measured in dataset-1 and dataset-2 are highly reliable and valid (Fornell & Larcker, 1981). However, based on the conceptualization of BR of the current paper along with the outstanding model fit data, BR model of dataset-2 was found to be a better model for measuring BR. Reliability and validity measures are in Table 10.

Table 10: Reliability and Validity Measures (BR Model)

Datasets	Constructs	Items	Cronbach's alpha	CR	CV (Item loadings)	AVE	MSV
CBBE	Bonding	B1 B2 B3	0.96	0.95	0.97*** 0.91*** 0.90***	0.87	0.90
Model-1	Intention	I1 I2	0.93	0.93	0.90*** 0.96***	0.86	0.90

	Table 10: continued							
	Bonding		0.96	0.96		0.89	0.83	
		B1			0.97***			
CDDE		B2			0.93***			
CBBE Model 2		B3			0.92***			
Model-2	Intention		0.93	0.93		0.87	0.83	
		I1			0.90***			
		I2			0.96***			

*Notes:* # CV – Convergent validity, CR – Composite reliability, AVE – Average variance extracted, MSV – Maximum shared variance. # \*\*\*P < 0.001 (two-tailed).

#### 5.4. Relationship Between CBBE and BR

Measuring the CBBE models' ability to explain and predict BR was done as follows. in structural model-1, dataset-1's CBBE Model–1 and BR Model were tested by structural equation modeling (SEM) to analyze the structural models of CBBE – BR. Similarly, in structural model-2, dataset-2's CBBE Model–2 and BR Model were tested by SEM to analyze the structural models of CBBE-BR.

### 5.4.1. Structural model 1: CBBE Model-1 and BR Model

The objective was to measure the potency of CBBE Model-1 to predict the BR. Following figure illustrates the constituents of the CBBE Model-1 and BR Model.





Source: Authors.

The CBBE Model-1 and the BR Model were analyzed in their latent form (as opposed to the composite form). The examination of nomological network with the regression estimates was conducted to assess the model's ability to achieve nomological validity. Table 11 contains regression estimates.

 
 Table 11: Regression Output (Standardized) of Structural Model of CBBE Model–1 and BR Model

		Estimate	Р	R <sup>2</sup>
Brand loyalty	 Bonding	0.837	***	0.82

Table 11: continued						
Perceived quality	>	Bonding	-0.047	0.448		
Brand awareness / associations		Bonding	0.164	***		
Brand loyalty		Intention	0.808	***		
Perceived quality	>	Intention	-0.011	0.839	0.92	
Brand awareness / associations		Intention	0.231	***	0.92	

*Notes*: \*\*\*P < 0.001.

The CBBE Model-1 was quite potent in explaining and predicting the BR. The CBBE Model-1 had quite strong explanatory and predictive power: The CBBE Model-1explained 82% of endogenous construct bonding (B) and 92% of the endogenous construct intention (I) of BR Model. One of the exogenous variables, perceived quality, turned out to be statistically insignificant (P =0.448: B; P = 0.839: I) while assessing the individual contribution for both of the endogenous constructs: bonding (B) and intention (I), of BR model. Apart from that, constructs such as brand loyalty had statistically significant (P < 0.001) path estimate for 0.808 bonding (B) and for 0.791 intention (I). And brand awareness/associations had standardized beta value of 0.164 for bonding (B) and 0.231 for intention (I) (P < 0.001). Following table contains the fit indices of the structural model of CBBE Model-1 and BR Model.

	Fit indices
Chi-Square (P = 0.000)	496.348
Degrees of freedom	126
CMIN/DF	3.939
GFI	0.87
AGFI	0.82
RMSEA	0.09
PCLOSE	0.000
SRMR	0.0335
CFI	0.95
NFI	0.94
TLI	0.94

Table 12: Structural Model Fit Indices: CBBE Model-1 and BR Model

As shown in the Table 12, the structural model fit indices of CBBE Model-1 and BR model indicated some issues in both GFI and AGFI (0.87 and 0.82), which were just below the threshold (0.90); however, the RMSEA (0.09) was within the moderate range. The structural model fit dataespecially the RMSEA value-indicate that the structural model with CBBE Model-1 could have had a better fit (Hu & Benter, 1999). The measurement model of BR Model had some model fit issues. And, since, structural model could not produce better fir indices than measurement model, consistency on having some fit issues in the structural model was expected. Regardless, the model was considered acceptable due to its good explanatory and predictive power.

#### 5.4.2. Structural model 2: CBBE Model-2 and BR Model

As it was for structural model-1, the objective here was to measure the potency of CBBE Model-2 to predict the BR. Following figure illustrates the elements of the CBBE Model-1 and BR Model.





Similar to the structural model-1, the CBBE Model-2 and the BR Model were analyzed in their latent form (as opposed to the composite form). The investigation of nomological network was conducted with the regression estimates from Table 13. The CBBE Model-2 turned out to be very good in explaining and predicting the BR. The CBBE Model–2 explained 79% of endogenous construct bonding (B) and 87% of the endogenous construct intention (I) of BR Model. However, exogenous construct – uniqueness (UQ) had statistically insignificant contribution on endogenous construct intention (I). Nevertheless, uniqueness (UQ) had statistically significant contribution on endogenous construct bonding (B) of BR model. Exogenous construct, perceived quality/perceived value for the cost (PQ/PVC), had path estimate of 0.582 for bonding (B) and 0.685 for intention (I) (P < 0.001). Exogenous construct uniqueness (UQ) had path estimate of 0.152 for bonding (B) (P < 0.035). Finally, exogenous construct willingness to pay price premium (WPP) had standardized beta value of 0.215 for bonding (B) and 0.236 for intention (I) (P < 0.001).

		Estimate	Р	<b>R</b> <sup>2</sup>
PQ / PVC	Bonding (B)	0.582	***	
UQ	Bonding (B)	0.139	0.035	0.79
WPP	Bonding (B)	0.207	***	
PQ / PVC	Intention (I)	0.685	***	
UQ	Intention (I)	0.062	0.301	0.87
WPP	Intention (I)	0.226	***	

Table 13: Regression Output of Structural Model of CBBE Model-2 and BR Model

*Notes:* PQ / PVC means Perceived quality / perceived value for cost; UQ means Uniqueness; WPP means Willingness to pay price premium. \*\*\*P < 0.001.

Source: Authors.

Following Table 14 contains the structural model fit indices of CBBE Model-2 and BR Model. The structural model fit indices of CBBE Model–2 and BR Model shown in the Table 14 are not as robust as the measurement model fit indices of the CBBE model-2 and BR model from dataset-2, namely GFI and AGFI (0.86 and 0.82) were just below the threshold. RMSEA (0.082) was at acceptable range and CMIN/DF was in permissible range; apart from that, CFI (0.96), NFI (0.95), and TLI (0.95) are of excellent level. For a structural model, based on the fit indices, the structural model of CBBE Model-2 and BR Model is well within the acceptable range (Netemeyer et al., 2004). The structural model of CBBE Model–1 and BR Model.

Fit indices				
Chi-Square (P = 0.0)	563.794			
Degrees of freedom	161			
CMIN/DF	3.502			
GFI	0.86			
AGFI	0.82			
RMSEA	0.082			
PCLOSE	0.000			
SRMR	0.0243			
CFI	0.96			
NFI	0.95			
TLI	0.95			

Table 14: Structural Model Fit Indices: CBBE Model-1 And BR Model

#### 6. CONCLUSION

In measuring CBBE, both CBBE models performed quite adequately since none of the models had any major validity issues. In CBBE Model-1, brand awareness/associations dimension and one item (AS3, loading 0.23) of brand association had factor loading below the threshold. The probable reason for that AS3 was administered in reversed scored, and reversed scored item tend to produce such problems when administered in different cultural setting; even in similar language setting (English), reversed scored items tend to perform poorly (Netemeyer et al, 2004, p.215). In addition, the CBBE Model-1 suffered from some model fit issues such as, RMSEA value of 0.082, which is still within acceptable range (MacCallum et al. 1996). Compared with CBBE Model-1, CBBE Model-2 has excellent model fit indices. On the reliability and validity front, CBBE Model-2 had one item (WPP1) from willingness to pay price a premium (WPP) dimension with loading (0.54), which is a bit low but still within acceptable range (Kline, 1998). Thus, validating that CBBE Model-2 is a superior model in measuring CBBE.

Between the two CBBE models, it has been stated based on the evidence, namely model fit indices and reliability and validity measure that CBBE Model-2 is a better measure of CBBE. In the structural models, assessing the predictive power of CBBE models' in predicting BR, both structural models' model fit indices were a bit off from the model fit indices of the measurement models. The concerning issue was with RMSEA in both models; however, both models had RMSEA less than or equals to 0.09, which indicate they were acceptable (MacCallum et al., 1996). In comparison of the path estimates of each construct, and the squared multiple correlations (SMC), the SMCs of CBBE Model–1 were excellent on both of the endogenous constructs, 0.82 bonding (B) and 0.91 intention (I), of BR. Yet, path estimates of the exogenous construct, perceived quality (QL), of CBBE Model–1 was not significant on both of the endogenous constructs (Bonding and Intention). The CBBE Model–2 also had very good (but a bit low compared to the SMC of CBBE Model–1) SMC as well: 0.79 bonding (B) 0.88 intention (I). CBBE Model–2 One of exogenous constructs, uniqueness (UQ), was not significant on endogenous construct, intention (I) construct of BR model. Regardless, given the better measurement model fit indices and structural model fit indices, CBBE Model-2 is a superior model in both measuring CBBE and predicting BR.

### 6.1. Implications and Further Research

### 6.1.1. Theoretical Implications

CBBE is arguably the foundational construct in all of brand management. The importance of developing a measure for CBBE cannot be stressed enough. In this study two of the most dominant measures of CBBE – Yoo and Donthu (2001) and Netemeyer et al. (2004) – have been empirically assessed in the context of carbonated soft drinks industry in Bangladesh. In addition, to the empirical assessment of CBBE measures, a new model of BR has been developed tested in this study. Assessing the robustness of the CBBE models in Bangladeshi context furthers the theoretical enrichment of CBBE and to a larger extent the entire brand management sub-field in the following way. Testing the CBBE measures in cross-cultural settings is the only way validate the universal consistency of the measure. Thus, since the models were developed in the American and Korean cultural settings, testing in Bangladeshi cultural setting is a step in the right direction to achieve the universal validation of the CBBE models. And, given that the excellent fit of the measurement models-particularly the ones from the Netemyer et al. (2004) - it can be said that those models held up quite in cross-cultural assessment. In addition to the evaluation of CBBE models, in this study, a BR model has been developed from the work of Lehmann et al. (2008) to measure the influence of CBBE on BR. This type of empirical evaluation of the structural relationship between CBBE and BR is also helpful furthering the knowledge of the relationship dynamics between CBBE and BR.

### 6.1.2. Managerial Implications

Other major contribution of this study is that it promises very insightful managerial implications. As explained in the local issue portion of the introduction chapter, in Bangladesh, predominantly in the FMCG sector, competition is fierce, thus formulating and employing marketing strategies centering on attaining CBBE and BR could help build loyal customer base. Powerful construct such as customer satisfaction that potentially influence financial returns of the brands could be attained through developing CBBE and eventually achieving BR. As discussed, the robust reliability and validity measures of the CBBE Models – predominantly the CBBE Model-2 and BR Model-Dataset 2–indicate that the dimensions of the CBBE and BR models capture the constructs brand equity and brand resonance properly. Thus, if necessary, the individual dimensions of CBBE and BR could be tailored to convenience and applied given the product portfolios of companies. In another industry where the relevance of CBBE and BR is paramount, the luxury goods industry. Formulating bustiness strategies pivoting around creating CBBE and BR could help ensure financial growth for companies with luxury product portfolios. Finally, in principle the scope of

application and relevance of CBBE and BR goes beyond the FMCG and luxury products to whole lot other industries where companies desire sustainable business models that can ensure financial growth.

The current research has an extensive scope of further research: the BR model can be measured separately in multiple product categories across different industries in different geographical locations to explore how the devised BR model perform in accomplishing generalization, and the influence of CBBE on BR can be tested in multiple product categories across different industries in different geographical locations.

### 6.1.3. Limitations

This study like many other studies had some unintended limitations. First, in CFA, the measurement models of CBBE and BR were modified by covarying the error terms within constructs. And, covering errors, if possible, should be avoided. Second, recollecting the data to have better model fit could have been adopted. Third, instead of one product category, multiple product categories from different industries could have been used, and the sample size could have been larger.

#### REFERENCES

Aaker, D. A. (1991). Managing brand equity. Simon and Schuster.

- Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review*, 38(3), 102-120. https://doi.org/10.2307/41165845
- Ambedkar, A. R., Murugesan, P., & Thamaraiselvan, N. (2018). Modeling brand resonance score (BRS)–An application in financial services. *Journal of Modelling in Management*, 13(1), 119-136. https://doi.org/10.1108/JM2-10-2016-0088
- Aziz, N. A., & Yasin, N. M. (2010). Analyzing the brand equity and resonance of banking services: Malaysian consumer perspective. *International Journal of Marketing Studies*, 2(2), 180-189. https://doi.org/10.5539/ijms.v2n2p180
- Cheng, Y. Y., Tung, W. F., Yang, M. H., & Chiang, C. T. (2019). Linking relationship equity to brand resonance in a social networking brand community. *Electronic Commerce Research* and Applications, 35, 100849. https://doi.org/10.1016/j.elerap.2019.100849
- Christodoulides, G., & Chernatony, L. D. (2010). Consumer-based brand equity conceptualization and measurement: A literature review. *International Journal of Market Research*, 52(1), 43-66. https://doi.org/10.2501/S1470785310201053
- Cho, E., & Hwang, J. (2020). Drivers of consumer-based brand EQUITY: A two-country analysis of perceived brand origin and identity expressiveness. *International Marketing Review*, 37(2), 241-259. https://doi.org/10.1108/IMR-12-2018-0351
- Duman, T., Ozbal, O., & Duerod, M. (2018). The role of affective factors on brand resonance: Measuring customer-based brand equity for the Sarajevo brand. *Journal of Destination Marketing & Management*, 8, 359-372. https://doi.org/10.1016/j.jdmm.2017.08.001
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. https://doi.org/10.1177/002224378101800104

- Ghorbani, H. (2019). Mahalanobis distance and its application for detecting multivariate outliers. *Facta Universitatis, Series: Mathematics and Informatics*, *34*(3), 583-595. https://doi.org/10.22190/FUMI1903583G
- Habib, S., Hamadneh, N. N., & Khan, M. A. (2021). Influence of electronic word of mouth (eWOM) and relationship marketing on brand resonance: A mediation analysis. *Sustainability*, 13(12), 6833. https://doi.org/10.3390/su13126833
- Huang, C. C., Yen, S. W., Liu, C. Y., & Chang, T. P. (2014). The relationship among brand equity, customer satisfaction, and brand resonance to brand repurchase intention, of cultural and creative industries in Taiwan, *The International Journal of Organizational Innovation*, 6(3), 106-120. https://www.proquest.com/docview/1491115380?fromopenview=true&pq-origsite=gscholar
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. https://doi.org/10.1080/10705519909540118
- Jang, K. K., Bae, J., & Kim, K. H. (2021). Servitization experience measurement and the effect of servitization experience on brand resonance and customer retention. *Journal of Business Research*, 130, 384-397. https://doi.org/10.1016/j.jbusres.2020.03.012
- Kang, I., Koo, J., Han, J. H., & Yoo, S. (2021). Millennial consumers perceptions on luxury goods: Capturing antecedents for brand resonance in the emerging market context. *Journal of International Consumer Marketing*, 34(2), 214-230. https://doi.org/10.1080/08961530.2021.1944832
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22. https://doi.org/10.1177/002224299305700101
- Keller, K. L. (2001). Building customer-based brand equity: A blueprint for strong brands (Report No. 01-107) [Working Paper]. Marketing Science Institute. https://www.msi.org/?post\_type=resources&p=2552
- Keller, K. (2003). Understanding brands, branding and brand equity. Journal of Direct Data and Digital Marketing Practice, 5, 7-20. https://doi.org/10.1057/palgrave.im.4340213
- Keller, K. L. (2013). *Strategic Brand Management: Building Measuring, and Managing Brand Equity*. Pearson.
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343-364. https://doi.org/10.1177/073428299801600407
- Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring customer-based brand equity. Journal of Consumer Marketing, 12(4), 11-19. https://doi.org/10.1108/07363769510095270
- Lehmann, D. R., Keller, K. L., & Farley, J. U. (2008). The structure of survey-based brand metrics. *Journal of International Marketing*, 16(4), 29-56. https://doi.org/10.1509/jimk.16.4.29
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130-149. https://doi.org/10.1037/1082-989x.1.2.130
- Mathur, M. (2018). Leveraging social media-based determinants to build customer-based brand equity of a retailer. *The International Review of Retail, Distribution and Consumer Research*, 28(5), 554-575. https://doi.org/10.1080/09593969.2018.1509799
- Martin, G. S., & Brown, T. J. (1990). In search of brand equity: The conceptualization and measurement of the brand impression construct. In Childers, MacKenzie, Leigh, Skinner, Lynch Jr, Heckler, Gatignon, Fisk and Graham (Eds.) *Marketing Theory and Applications*. American Marketing Association.
- Mills, I., & Williams, A. (2016). Understanding brand equity in campus recreational sports: A consumer-based perspective. *Recreational Sports Journal*, 40(2), 120-132.

https://doi.org/10.1123/rsj.2015-0019

- Moore, D., & Wurster, D. (2007). Self-brand connections and brand resonance: The role of gender and consumer emotions. In G. Fitzsimons, & V. Morwitz (Eds.). Advances in Consumer Research Volume 34. Associations for Consumer Research.
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Ricks, J., & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209-224. https://doi.org/10.1016/S0148-2963(01)00303-4
- Pina, R., & Dias, Á. (2020). The influence of brand experiences on consumer-based brand equity. Journal of Brand Management, 28(2), 99-115. https://doi.org/10.1057/s41262-020-00215-5
- Park, C. S., & Srinivasan, V. (1994). A survey-based method for measuring and understanding brand equity and its extendibility. *Journal of Marketing Research*, 31(2), 271-288. https://doi.org/10.1177/002224379403100210
- Raji, R. A., Rashid, S. M., & Ishak, S. M. (2018). Consumer-based brand equity (CBBE) and the role of social media communications: Qualitative findings from the Malaysian automotive industry. *Journal of Marketing Communications*, 25(5), 511-534. https://doi.org/10.1080/13527266.2018.1455066
- Rani, P. (2019). Customer-based brand equity index of Kurukshetra. Journal of Tourism Analysis: Revista De Análisis Turístico, 26(1), 48-61. https://doi.org/10.1108/JTA-11-2018-0034
- Raut, U. R., Brito, P. Q., & Pawar, P. A. (2020). Analysis of brand resonance measures to access, dimensionality, reliability, and validity. *Global Business Review*, 21(1), 162-175. https://doi.org/10.1177/0972150919846964
- Raza, M., Salleh, S., Tariq, B., Altayyar, R. S., & Shaari, H. (2020). Investigating the effects of customer-based brand equity on turnover intentions with mediating effect of customer citizenship behavior. *Management Science Letters*, 10(2), 279-286. https://doi.org/10.5267/j.msl.2019.9.004
- Saeed, M., & Shafique, I. (2019). Customer-based brand equity and destination visit behaviour in the tourism industry: The contingent role of social media. *Quality & Quantity*, 54(5-6), 1491-1512. https://doi.org/10.1007/s11135-019-00898-2
- Sharma, R. (2017a). Building customer-based brand equity of domestic brands: Role of brand equity dimensions. *Metamorphosis*, 16(1), 45-59. https://doi.org/10.1177/0972622517702187
- Sharma, R. (2017b). Understanding the role of store image in influencing customer-based brand equity and its dimensions in Indian sportswear industry. *Management and Labour Studies*, 42(3), 167-189. https://doi.org/10.1177/0258042X17721003
- Sürücü, Ö., Öztürk, Y., Okumus, F., & Bilgihan, A. (2019). Brand awareness, image, physical quality and employee behavior as building blocks of customer-based brand equity: Consequences in the hotel context. *Journal of Hospitality and Tourism Management*, 40, 114-124. https://doi.org/10.1016/j.jhtm.2019.07.002
- Tasci, A. D. A. (2019). Exploring the analytics for linking consumer-based brand equity (CBBE) and financial-based brand equity (FBBE) of destination or place brands. *Place Branding* and Public Diplomacy, 16(1), 36-59. https://doi.org/10.1057/s41254-019-00125-7
- Washburn, J. H., & Plank, R. E. (2002). Measuring brand equity: An evaluation of a consumerbased equity scale. *Journal of Marketing Theory and Practice*, 10(1), 46-62. https://doi.org/10.1080/10696679.2002.11501909

Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14. https://doi.org/10.1016/S0148-2963(99)00098-3

#### **APPENDIX A**

#### CBBE and BR items and items' Mean (M) and Standard deviations (SD)

### (A1) CBBE Model-1 Items

#### Table A1: CBBE Model-1 Items, and Items' Mean and Standard Deviations

ITEMS	Μ	SD			
Brand Loyalty (LO)					
LO1. I consider myself to be loyal to X	2.78	1.30			
LO2. X would be my first choice	2.54	1.30			
LO3. I will not buy other brands if X is available at the store.	2.52	1.32			
Perceived quality (QL)	Perceived quality (QL)				
OL2. The likely quality of X is extremely high.	3.05	1.21			
QL3. The likelihood that X would be functional is very high.	2.98	1.17			
Brand awareness/ associations (AW/AS)	Brand awareness/ associations (AW/AS)				
AW2. I can recognize X among other competing brands.	3.76	1.09			
AW3. I am aware of X.	3.55	1.20			
AS1. Some characteristics of X come to my mind quickly.	3.40	1.21			
AS2. I can quickly recall the symbol or logo of X.	3.68	1.22			
AS3. I have difficulty in imagining X in my mind. (r)	3.54	1.22			

Notes: X indicates brand name, (r) indicates reversed scored items; M: mean, SD: standard deviation.

#### (A2) Items of BR Model was adapted from Lehmann et al. (2008)

	Data	Dataset-1 Data		iset-2
	М	SD	М	SD
Bond	ing (B)			
B1. I am strongly committed to X.	2.47	1.27	2.63	1.27
B2. X shares my values.	2.44	1.25	2.71	1.28
B3. This brand has earned my confidence.	2.52	1.28	2.71	1.31
Inten	tion (I)			
I1. I plan to buy X in the future.	2.89	1.31	3.02	1.28
I2. If I buy a soft drink, I am likely to buy X.	2.66	1.26	2.84	1.26
Notes: X indicates brand name.				

#### Table A2: BR Model Items, and Items' Mean and Standard Deviations

### (A3) Items of CBBE Model-2 was adapted from Netemeyer et al. (2004)

	Μ	SD
Perceived quality/perceived value for the cost (PQ/PVC)		
PQ/PVC 1. Compared to other brands of (product), X is of very high quality.	3.07	1.26
PQ/PVC 2. X is the best brand in its product class.	2.94	1.27
PQ/PVC 3. (Brand name) consistently performs better than all other brands of (product).	3.03	1.24
PQ/PVC 4. I can always count on X brand of (product) for consistent high quality.	2.98	1.22
PQ/PVC 5. What I get from X brand of (product) is worth the cost.	3.04	1.16
PQ/PVC 6. All things considered (price, time, and effort), X brand of (product) is a good buy.	3.09	1.22
PQ/PVC 7. Compared to other brands of (product), X is a good value for the money.	3.03	1.27
PQ/PVC 8. When I use a X brand of (product), I feel I am getting my money's worth.	2.90	1.24
Uniqueness (UQ)		
UQ1. X is "distinct" from other brands of (product).	3.16	1.11
UQ2. X really "stands out" from other brands of (product).	3.01	1.05
UQ3. X is very different from other brands of (product).	3.04	1.13
UQ4. X is "unique" from other brands of (product).	3.03	1.17
Willingness to pay a price premium (WPP)		
WPP1. The price of X would have to go up quite a bit before I would switch to another brand of (product).	2.96	1.13
WPP2. I am willing to pay a higher price for X brand of (product) than for other brands of (product).	2.68	1.20
WPP3. I am willing to pay a lot more for X than other brands of (product category).	2.60	1.22

#### Table A3: CBBE Model-2 Items and Items' Mean and Standard Deviations

Notes: Items (PQ/PVC) 1, 2, 3, and 4 represent PQ and Items 5, 6, 7, and 8 represent PVC. X indicates brand name.